



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,930	09/29/2003	Josef Dietl	13913-064001 / 2002P00240	2375
32864	7590	08/23/2007	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			HOMAYOUNMEHR, FARID	
		ART UNIT	PAPER NUMBER	
		2132		
		MAIL DATE	DELIVERY MODE	
		08/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/675,930	DIETL, JOSEF	
	<b>Examiner</b>	<b>Art Unit</b>	
	Farid Homayounmehr	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 June 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-8,10,11 and 13-17 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1, 3-8, 10, 11, 13-17 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This action is responsive to communications: application, filed 9/29/2003; amendment filed 6/8/2007.

2. Claims 1-17 have been considered. Claims 2, 9, and 12 cancelled by the applicant.

***Response to Arguments***

3: Applicant's arguments in view of amendments have been found persuasive. The objection to claim 8 and rejection under section 101 is hereby withdrawn. See the new grounds of rejection in the next section.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2132

5. Claims 1, 3-8, 10, 11, 13-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Slater et. al (US Patent Application Publication No. 2002/0069179, filed June 6, 2001), and further in view of Shioda (US Patent No. 6,634,559, filed March 29, 2001).

5.1. As per claim 1, Slater is directed to a computer implemented method, comprising: generating an electronic document in a workflow system (parag. 31 shows generation of an electronic document, and parag. 33 indicates that the invention can be used in applications such as business licenses, which is an example of a workflow system as identified by applicant's specification), for use with an external entity that does not exchange electronic documents with the workflow system (Shioda teaches a data sheet that can be carried by the user (abstract). The data sheet includes a printout of the encoded entire electronic document on paper (col. 2 lines 22-63). The data sheet, which includes the entire document on a printout (not stored electronically), is distributed to other systems by the user (col. 3 lines 5-35). Note that a decoding unit decodes the encoded entire document to obtain the entire document back), the electronic document having content, the electronic document further having a document appearance, the appearance representing the content (Slater parag 31 shows that the document is readable by both machine and human, therefore it has a content and appearance. Also see Fig. 2B and associated text); attaching one or more approval codes to the electronic document, such that when the document is printed, each approval code generates an approval mark (per Slater parag. 30, the signer of the

Art Unit: 2132

document examines it (approve) and signs it (approval code), which is verifiable. As mentioned above, Slater teaches printing the document. Also per teachings of Shioda, the entire document is printed on the paper in the encoded form and also the image, therefore the approval codes are also printed); generating one or more control codes for the electronic document as part of a workflow in the workflow system (control codes are the signature blocks added to document as described in parag. 29-32, which contain the signatures. Note that the digital signatures are encrypted (see Slater parag. 13, indicating that the digital signature is decrypted), and therefore the encrypted digital signature creates a control code for verification of the digital signature),

wherein a control code is generated for each approval code (each digital signature is encrypted and saved in the signature block), and a separate control code is generated based on the contents of the print out (Slater teaches signing the entire document), the one or more control codes being usable to respectively authenticate the approval mark or validate the content of the printout (Slater parag. 31-34 shows verification of each signature); and creating a print out, the print out including the document appearance, the approval mark corresponding to each approval code and the one or more control codes (Slater parag. 64 and also 84. Also note that Shioda teaches printing the entire document).

Slater and Shioda are combined to teach the claim limitation as described above, as it would have been obvious to the one skilled in art to combine the inventions. This is

Art Unit: 2132

because Slater and Shioda are analogous arts as they are directed to management and distribution of electronic documents. Shioda teaches a data sheet, by which an electronic can be carried and distributed by the user. Therefore, the one skilled in art would be motivated by Shioda to carry and distribute Slater's electronic document.

5.2. Claim 2 cancelled by the applicant

5.3. As per claim 3, Slater is directed to the method of claim 2, wherein generating the approval mark comprises:

generating a digital signature as the approval code (see response to claim 1); and generating a signature image associated with the approval code (when the signature is printed, the image of the signature is produced).

5.4. As per claim 4, Slater is directed to the method of claim 1, wherein generating one or more control codes comprises: generating a single control code for the print out (per paragraph 32, the recorder signature and notary signature may be omitted. Per parag 44, one or more persons may sign it. Therefore, it is possible only one person signs the document, which means a single signature (control code) is generated and printed).

5.5. As per claim 5, Slater is directed to the method of claim 1, wherein the print out has one or more physical pages and generating the one or more control codes

Art Unit: 2132

comprises: generating one or more control codes, each control code corresponding to a page of the one or more physical pages (placing each digital signature in a separate page is a design choice that is obvious to a person skilled in art).

5.6. As per claim 6, Slater is directed to the method of claim 1, wherein generating the one or more control codes comprises: converting the electronic document to a canonical form; and generating the one or more control codes by encrypting the canonical form with a private key, the private key having an associated public key certificate for retrieving a public key associated with the private key (conversion to canonical forms before creating digital signatures were well known in art. Slater suggests use of XML schema to embed digital signatures. One of the features of XML is the capability of converting the XML document to its canonical form according to W3C Canonical XML 1.0 recommendation (as a reference see "Canonical XML Version 1.0" and "Core XML Standards", both of which are attached to this office action). It would have been obvious to a person skilled in art to convert the document to its canonical form and encrypt the canonical form to generate a digital signature. The motivation to do so is faster and more efficient encryption performed on canonical documents, as described, for example, in section 1.2 of "Canonical XML Version 1.0". Use of private and public keys to create and verify digital signatures was well known and widely practiced at the time of invention).

Art Unit: 2132

5.7. As per claim 7, Slater is directed to the method of claim 1, further comprising: receiving the print out at the workflow system, the print out having a subsequently added human signature; and validating the received print out within the workflow system (validation of signatures on a paper is known in the prior art as suggested in parag. 6)

5.8. Limitations of claim 8 are directed to receiving and verifying the documents generated in claims 1-7 above. Figs. 4-6 and associated text describe receiving and validating the digital documents.

5.9. Limitations of claims 10, 11, 13-17 are substantially the same as limitations of claims 1, 3-7 above.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2132

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farid Homayounmehr whose telephone number is (571) 272-3739. The examiner can be normally reached on 9 hrs Mon-Fri, off Monday biweekly.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Farid Homayounmehr*

8/17/2007

*Gilberto Barron Jr.*  
GILBERTO BARRON JR  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100